TOTAL SHEET NO. 29



ANCHOR BOLT

The anchor bolt shall be fabricated from cold drawn or hot finished seamless carbon steel mechanical tubing conforming to ASTM A 519, Grade 1026, CW and supplied with hexagonal nuts and cut washers.

The coil wire shall be made of any suitable soft steel wire.

The finished anchor bolt shall be cleaned of rust and other foreign materials and wrapped or packaged to prevent contamination until they are installed.

The epoxy grout shall be a two-component, epoxy resin bonding system conforming to ASTM C 881, Type I, Grade 1 and of a Class suitable for the temperature at installation.

## INSTALLATION PROCEDURE FOR THE ILLINOIS COIL-LOCK ANCHOR BOLT

- 1. With the coil wire in place, the bolt shall be inserted into the hole and turned clockwise to a snug fit in the hole. Nut and washer shall be placed on the bolt. The nut shall be tensioned until the steel base plates are held securely to the concrete
- 2. Epoxy grout shall be pumped through the zerk fitting with a pressure gun. Pumping shall continue until the epoxy overflows the hole around the bolt shank. After pumping is discontinued, excess epoxy shall be immediately wiped off.

## ALTERNATE ANCHOR BOLTS

The Contractor may use, at his option, the capsule or the adhesive cartridge type anchor rods that have been previously tested and given a prior approval by the Department. The Contractor shall install these anchor rods in pre-drilled holes according to the manufacturer's recommendations and procedures.

The capsule or the adhesive cartridge type anchor rods shall be a two part system composed of:

- 1. A threaded rod stud with nut and washer of the type specified.
- A sealed glass capsule or a sealed glass adhesive cartridge containing premeasured amounts of the adhesive chemical.

Location	Туре	Size (inch diameter)	Length (inches)*	Quantity
West Abutment	A325	1	12	12
Pier #1	A325	1'4	<i>1</i> 5	12
Pier #2	A325	1'4	15	12
Pier #3	A325	$I_2^l$	18	24
Pier #4	A325	1	12	24
East Abutment	A325	1	12	12

ASTM F 1554 Grade 105, ASTM A 449 and AASHTO M 314 Grade 105 anchor bolts may be substituted for the anchor bolts shown above.

\* Lengths shown are the required total lengths for the Illinois Coil or cast-in-place headed anchor bolts. The required total length for the sealed capsule alternate anchor bolts shall be according to the manufacturer's recommendations.

## NOTES

Holes in the masonry for anchor bolts shall be drilled through the base plates to the diameter and depth shown or according to the manufacturer's recommendation after beams or girders have been erected and adjusted.

Prior to setting the bolts, the holes shall be dry and all dust and loose particles shall be removed by the use of compressed air or vacuuming.

The anchor bolts, furnished and installed and including the epoxy grout or capsules shall be paid for at the contract unit price per each for Anchor Bolts, of the diameter specified.

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item which is the property of the Illinois Department of Transportation. Use, reproduction or disclosure without express written permission is prohibited and protected under Federal copyright laws. The production and "d" Holes with zerk the fabrication of this bolt for use on highway projects for epoxy grout in the State of Illinois shall be permitted and there shall be no incurred charges or fees to the manufacturer or the fabricator for producing or fabricating this bolt. "D"ø 134" 18" 138" 2" 14" Anchor Bolt (See Table Below 158" 15/6' 218' for number, size and length.) 218" 11316 3<sup>3</sup>8′′ 2/2" Top of base plate End of End of groove coil lock 532 wide x 332 deep groove in anchor bolt with 18" φ 16" at Bottom of coil PLAN-COIL WIRE

The Illinois Coll-Lock Anchor Bolt is a proprietary

ILLINOIS COIL-LOCK ANCHOR BOLT

Corporate License Number 184-001-084

ANCHOR BOLT DETAILS

EASTBOUND HARRISON AVENUE OVER UP & CC&P RAILROAD F.A.P. ROUTE 0525 SECTION 02-00518-00-BR ROCKFORD, ILLINOIS STATION 95+72.00 STRUCTURE NO. 101-6111

